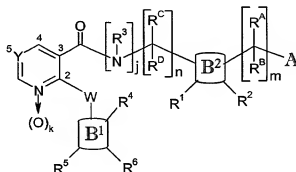
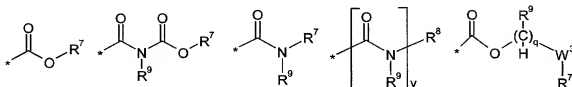


ABSTRACT OF THE DISCLOSURE

Compounds useful as inhibitors of PDE4 in the treatment of diseases regulated by the activation and degranulation of eosinophils, especially asthma, chronic bronchitis, and chronic obstructive pulmonary disease, of the formula:



wherein j is 0 or 1, k is 0 or 1, m is 0, 1, or 2; n is 1 or 2; A is selected from the partial Formulas:



10 where q is 1, 2, or 3, \mathbf{W}^3 is $-\text{O}-$, $-\text{N}(\text{R}^9)-$, or $-\text{OC}(=\text{O})-$; \mathbf{R}^7 is selected from $-\text{H}$; $-(\text{C}_1-\text{C}_6)$ alkyl, $-(\text{C}_2-\text{C}_6)$ alkenyl, or $-(\text{C}_2-\text{C}_6)$ alkynyl substituted by 0 to 3 substituents R^{10} ; $-(\text{CH}_2)_n-(\text{C}_3-\text{C}_7)$ cycloalkyl where n is 0, 1 or 2, substituted by 0 to 3 R^{10} , and phenyl or benzyl substituted by 0 to 3 R^{14} ; \mathbf{R}^8 is tetrazol-5-yl; 1,2,4-triazol-3-yl; 1,2,4-triazol-3-on-5-yl; 1,2,3-triazol-5-yl; imidazol-2-yl; imidazol-4-yl; imidazolidin-2-on-4-yl; 1,3,4-oxadiazolyl; 1,3,4-oxadiazol-2-on-5-yl; 1,2,4-oxadiazol-3-yl; 1,2,4-oxadiazol-5-on-3-yl; 1,2,4-oxadiazol-5-yl; 1,2,4-oxadiazol-3-on-5-yl; 1,2,5-thiadiazolyl; 1,3,4-thiadiazolyl; morpholinyl; parathiazinyl; oxazolyl; isoxazolyl; thiazolyl; isothiazolyl; pyrrolyl; pyrazolyl; succinimidyl; glutarimidyl; pyrrolidonyl; 2-piperidonyl; 2-pyrindonyl; 4-pyridonyl; pyridazin-3-on-yl; pyridyl; pyrimidinyl; pyrazinyl; pyridazinyl; indolyl; indolynyl; isoindolynyl; benzo[b]furanyl; 2,3-dihydrobenzofuranyl; 1,3-dihydroisobenzofuranyl; 2*H*-1-benzopyranyl; 2*H*-chromenyl; chromanyl; benzothienyl; 1*H*-indazolyl; benzimidazolyl; benzoxazolyl; benzisoxazolyl; benzothiazolyl; benzotriazolyl; benzotriazinyl; phthalazinyl; 1,8-naphthyridinyl; quinolinyl; isoquinolinyl; quinazolinyl; quinoxalinyl; pyrazolo[3,4-*d*]pyrimidinyl; pyrimido[4,5-*d*]pyrimidinyl; imidazo[1,2-*a*]pyridinyl; pyridopyridinyl; pteridinyl; or 1*H*-purinyl; or \mathbf{A} is selected from phosphorus and sulfur acid groups; W is $-\text{O}-$; $-\text{S}(=\text{O})_t-$, where t is 0, 1, or 2; or $-\text{N}(\text{R}^3)-$; Y is $=\text{C}(\text{R}^1)_2-$, or

- $-\text{[N}=\text{(O)}_k\text{]}$ where k is 0 or 1; R^4 , R^5 and R^6 are (1) $-\text{H}$; provided that R^5 and R^6 are not both $-\text{H}$ at the same time, $-\text{F}$; $-\text{Cl}$; $-(\text{C}_2-\text{C}_4)$ alkynyl; $-\text{R}^{16}$; $-\text{OR}^{16}$; $-\text{S(=O)}_p\text{R}^{16}$; $-\text{C(=O)R}^{16}$; $-\text{C(=O)OR}^{16}$; $-\text{OC(=O)R}^{16}$; $-\text{CN}$; $-\text{NO}_2$; $-\text{C(=O)NR}^{16}\text{R}^{17}$; $-\text{OC(=O)NR}^{16}\text{R}^{17}$; $-\text{NR}^{12}_a\text{C(=O)NR}^{16}\text{R}^{17}$; $-\text{NR}^{12}_a\text{C(=NR}^{12}_a\text{NR}^{16}\text{R}^{17})$; $-\text{NR}^{12}_a\text{C(=N-NO}_2\text{)NR}^{16}\text{R}^{17}$; $-\text{C(=NR}^{12}_a\text{NR}^{16}\text{R}^{17})$; $-\text{CH}_2\text{C(=NR}^{12}_a\text{NR}^{16}\text{R}^{17})$; $-\text{OC(=NR}^{12}_a\text{NR}^{16}\text{R}^{17})$; $-\text{OC(=N-NO}_2\text{)NR}^{16}\text{R}^{17}$; $-\text{NR}^{16}\text{R}^{17}$; $-\text{CH}_2\text{NR}^{16}\text{R}^{17}$; $-\text{NR}^{12}_a\text{C(=O)R}^{16}$; $-\text{NR}^{12}_a\text{C(=O)OR}^{16}$; $=\text{NOR}^{16}$; $-\text{NR}^{12}_a\text{S(=O)}_p\text{R}^{17}$; $-\text{S(=O)}_p\text{NR}^{16}\text{R}^{17}$; and $-\text{CH}_2\text{C(=NR}^{12}_a\text{NR}^{16}\text{R}^{17})$; (2) $-(\text{C}_1-\text{C}_4)$ alkyl including dimethyl and $-(\text{C}_1-\text{C}_4)$ alkoxy substituted with 0 to 3 substituents $-\text{F}$ or $-\text{Cl}$; or 0 or 1 substituent $-(\text{C}_1-\text{C}_2)$ alkoxy carbonyl-, (C_1-C_2) alkyl carbonyl-, or (C_1-C_2) alkyl carbonyloxy-; or (3) an aryl or heterocyclic moiety; or (4) R^5 and R^6 are taken together to form a moiety of partial Formulas (1.3.1) through (1.3.15):



(1.3.1)



(1.3.2)



(1.3.3)



(1.3.4)



(1.3.5)



(1.3.6)



(1.3.7)



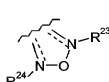
(1.3.8)



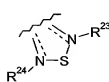
(1.3.9)



(1.3.10)



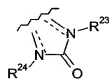
(1.3.11)



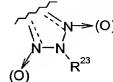
(1.3.12)



(1.3.13)



(1.3.14)



(1.3.15)

or a pharmaceutically acceptable salt thereof.